DEPARTMENT OF THE ARMY
HEADQUARTERS, WALTER REED ARMY MEDICAL CENTER
6900 Georgia Avenue, NW
Washington, DC 20307-5001

WRAMC Regulation
No. 385-9

21 May 2001

Safety

RESPIRATORY PROTECTION PROGRAM

Contents

1. History
This issue is a new publication.

2. Applicability
a. This regulation applies to attached or supported Walter Reed Army Medical Center (WRAMC) organizational elements and tenant units. Whenever a Respiratory Protective Equipment (RPE) is used, regardless of reason or length of time, this regulation shall be followed without exception.

b. This regulation does ot apply to military protective masks, designed and issued for protection against chemical, biological and radiological warfare agents as well as other military-unique applications.

3. Purpose
To prescribe; policy, responsibility, and procedures for the Respiratory Protection Program (RPP) implementation in accordance with (IAW) requirements of 29 Code of Federal Regulations (CFR) Pare 1910.

4. References
Required/related references are listed in Appendix a. A prescribed form is also listed (see Figure 1).

1. Explanation of abbreviations and terms
Abbreviations and terms used are explained in the Glossary.

6. Responsibilities

a. Commander, WRAMC, will:

(1) Ensure implementation of a respiratory protection program IAW this regulation by all installation units and activities.

(2) Appoint a Respiratory Protection Program Administrator (RPPA). Appropriate training or experience commensurate with program complexity will qualify this individual to oversee and administer the RPP and conduct required evaluations to determine program effectiveness.

(3) Ensure Respiratory Protective Equipment (RPE), training and medical evaluations are provided at o cost to Walter Reed Army Medical Center (WRAMC), Department of the Army (DA), and Department of Defense (DOD) personnel. These services will not be provided to contract personnel, unless specifically specified within their contract with WRAMC and DOD military tenant commands. The term employer applies to all military commands. The term employee applies to military personnel and appropriated funded (AF), wage grade (WG), non-appropriated funded (NAF) personnel, along with contract personnel under the direct supervision of military and AF/WG/NAF personnel.

(4) Provide sufficient resources to implement an effective RPP.

(5) Ensure enforcement of the provisions of the RPP as prescribed in this regulation.

(6) Establish an abatement program to alleviate the need for respiratory protection through engineering controls when feasible.

b. Tenant Commanders will:

(1) Ensure implementation of a RPP IAW this regulation for their personnel.

(2) Ensure RPE, training, and medical evaluations/examinations are provided at no cost to the employee required to use RPE.

(3) Provide sufficient resources to implement an effective RPP.

(4) Ensure enforcement of the provisions of the RPP as prescribed in this regulation.

(5) Establish an abatement program to alleviate the need for respiratory protection through engineering controls when feasible.

c. Respiratory Protection Program Administrator (RPPA) will:

(1) Serve as a member of the Installation Safety Office (ISO).

(2) Plan, program, and evaluate the RPP.

(3) Prepare a local implementing regulation prescribing the RPP in coordination with the ISO Industrial Hygiene Section (IHS). Ensure review at least annually and update as needed.

(4) Review and approve all RPP Standard Operating Procedures (SOPs) prepared by supervisor for worksites where PPE is used prior to publication and distribution.

(5) Initiate prompt corrective action to correct deficiencies detected in RPP.

d. Installation Safety Office (ISO) and Industrial Hygiene Section (IHS) responsibilities overlap in the implementation of this program. As mentioned in paragraph c above, the RPPA has overall responsibility for the program; however, ISO and Industrial Hygiene (IH) personnel will coordinate to perform the following duties:

(1) Conduct worksite inspections to identify areas that may need respiratory protection.

(2) Provide direction to the RPPA to plan, program and annually evaluate the installation's RPP.

(3) Coordinate with the RPPA to prepare a local regulation prescribing the installation's RPP.

(4) Provide guidance to supervisors in the preparation of written worksite specific RPP SOPs.

(5) Monitor implementation of the Confined Space Entry Program IAW WRAMC Reg 385-8.

(6) During safety and IH inspections required by AR 385-10 and AR 40-5, evaluate the RPP and notify the supervisor and RPPA of deficiencies.

(7) Conduct random inspections to determine if RPE is properly selected, used, cleaned, maintained, stored, and disposed of.

e. Installation Safety Office will:

(1) Appoint on orders a member of the Installation Safety Office to serve as the RPPA.

(2) Ensure that Hazard Communication (HAZCOM) training, as related to the RPP, is implemented IAW WRAMC Reg 385-6, WRAMC Hazard Communication Program.

f. Industrial Hygiene Section will:

(1) Determine worksites requiring respiratory protection and the specific type of RPE required.

(2) Maintain a current inventory of all work areas containing respiratory hazards and the type of RPE required. Provide a copy of the inventory to the RPPA and Occupational Health Clinic (OHC) whenever changes are made. In addition, maintain a list of worksites where voluntary RPE are in use.

(3) Provide training to supervisors and employees that meets the requirements of this regulation.

(4) Perform qualitative/quantitative respirator fit tests as deemed appropriate IAW procedures outlined in 29 CFR 1910.134. Persons administering fit test shall be able to prepare test solutions, calibrate equipment perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.

(5) Maintain records related to RPE fit testing and RPP training IAW this regulation.

(6) Perform quality assurance evaluations of breathing air quality for air-supplied RPE.

(7) Maintain necessary inventory levels of RPE used for fit testing.

(8) Provide users with RPE certification card after medical/training/fit test requirements are met.

(9) Monitor that the fire department

conducts monthly inspections of emergency use of RPE and Self Contained Breathing Apparatus (SCBA).

(10) Appoint on orders a member of IHS to serve as the Installation Respirator Specialist IAW AR 11-34 to coordinate and provide fit testing and respirator use training.

(11) Assist the RPPA to review worksite specific RPP SOPs.

(12) Counsel employees requesting voluntary RPE use.

g. Occupational Health Clinic (OHC), Preventive Medicine Service (PMS) will:

(1) Perform medical evaluation and examination IAW this regulation to determine if employees assigned to tasks requiring RPE use are able to perform duties while wearing prescribed RPE.

(2) Provide a written recommendation regarding the employee's ability to use the prescribed RPE to the supervisor and a copy to the employee.

(3) Coordinate with Optometry Clinic to arrange for protective lens fittings inside full-face piece RPE.

(4) Review medical documentation provide by employees requesting voluntary RPE use and provide medical advice to supervisors and employees regarding RPE medical effects.

h. Optometry Clinic will provide examination to fit corrective lenses required for use inside full-facepiece RPE IAW the Occupational Vision Program WRAMC Pam 40-14. Use of contact lenses with full-facepiece RPE is prohibited.

i. Supervisors shall identify worksites requiring RPE and coordinate with IHS to obtain worksite evaluation to determine need/type of RPE required.

j. Supervisors in worksites where RPE is worn will:

(1) Ensure that a job hazard analysis is prepared for all activities that require RPE.

(2) Prepare and implement a written worksite-specific RPP SOP for workplaces where RPE is required. Obtain approval for the document from the RPPA prior to publication and distribution. Ensure SOP is readily available to all employees.

(3) Identify employees who must wear RPE and coordinate fit tests and training with HIS prior to assignment requiring RPE and annually thereafter.

(4) Ensure employees receive equired initial and follow-up medical evaluations and examinations.

(5) Allow employees time during working hours to discuss the results of OHC medical evaluations.

(6) Familiarize employees with this regulation and the worksite specific RPP SOP.

(7) Indicate job requirement to use RPE on the Standard Form 52, (Request for Personnel Action) on submission to Civilian Personnel Activity Center for recruitment. Advise selectees for vacancies requiring RPE of this requirement before accepting position.

(8) Ensure employees receive training on the respiratory hazards to which they may be exposed including RPE selection, use, maintenance, and storage.

(9) Budget for and provide RPE to employees when required for work. Procure only approved RPE and replacement parts specified by the IHS and RPPA.

(10) Ensure employees do not perform tasks that require RPE when RPE is not worn or does not fit.

(11) Implement rescue/standby requirements in immediately Dangerous to Life or Health (IDLH) environments.

(12) Ensure employees perform maintenance and/or care of RPE IAW mandatory procedures.

(13) Provide facilities for cleaning, maintenance, and proper storage of equipment

(14) Ensure that areas requiring the use of RPE are properly marked.

(15) Include a statement in the job description that proper use of RPE is a critical element. Consider RPE user performance in performance appraisals.

(16) Notify IHS of any employee with OHC for review of employee's physician's medical clearance.

k. Respiratory Protective Equipment User will:

(1) Be familiar with this regulation's provisions, their worksite RPP SOP and the available RPE.

(2) Use, inspect, store, clean, and maintain RPE IAW this regulation, manufacturer's instructions, training provided, and worksite guidelines.

(3) Immediately notify supervisor of damaged and/or malfunctioning RPE or need for RPE.

(4) Undergo medical evaluations.

(5) Participate in RPP training as required.

(6) Carry RPE Certification Card at all times while using RPE.

(7) Notify supervisor of any medical conditions affecting the ability to wear a respirator or respirator fit.

l. Civilian Personnel Activity Center (CPAC) shall:

(1) Provide administrative support as required to individuals responsible to ensure/enforce the RPP.

(2) Examples of this support are:

(a) Referring personnel being considered for employment in operations requiring the use of RPE to the OHC for pre-employment medical evaluation.

(b) Assisting in reassigning employees presently working in areas requiring RPE that are unable to wear the required protection as determined by the OHC and the ISO.

(c) Providing support to supervisors and others responsible for ensuring enforcement of requirements.

m. Directorate of Contracting will:

(1) Require employees to use RPE when dealing with hazard material that requires use of RPE.

(2) Procure only approved RPE as specified by the RPPA and IHS.

(3) Ensure contracts contain requirement to comply with this regulation where contractor is performing work requiring RPE.

n. Fire Chief will:

(1) Provide training for firefighters using RPE in coordination with the IHS.

(2) Be available for emergency situations where an Self Containing Breathing Apparatus (SCBA) is required to enter a contaminated atmosphere.

(3) Perform monthly inspections; maintain a log on all RPE inspections within the Fire Department.

(4) Establish procedures for monitoring the breathing air quality for air-supplied RPE in coordination with the RPPA.

o. Directions of Public Works and Directorate of Logistics will:

(1) Erect and maintain caution signs for respiratory protection upon receipt of work order from an area supervisor.

(2) Implement engineering controls to reduce or eliminate airborne contaminant concentrations.

7. General

a. Respiratory protection is a command duty. Commanders must ensure compliance. If required to protect employees, commanders must ensure a written worksite specific RPP is established/implemented that will meet the requirements of CFR 1910.134 and this regulation.

b. Respiratory Protection Program (RPE) is not the method of choice for controlling airborne concentrations exceeding limits established by Occupational Safety and Health Administration (OSHA) or other recognized authorities. The goal of the Army's Occupational Safety and Health Program is to eliminate workplace hazards and the need for RPE. However, when hazard abatement engineering controls or purchase of less considered an acceptable method of protection only under the following circumstances:

(1) When safety/medical personnel determine engineering controls/work practices are not adequate.

(2) During intermittent, non-routine operations not exceeding one (1) hour per week.

(3) During interim periods while engineering controls are being designed, funded, and/or installed.

(4) During emergencies, i.e., fires, or hazardous materials spill.

(5) When required by other Federal regulation or operating license.

c. Wherever economically feasible technology exists for eliminating or reducing the cause of an environmental respiratory hazard, the following engineering control methods will be implemented:

(1) Substitution of less toxic substances.

(2) Installation of local exhaust systems.

(3) Natural or mechanical ventilation.

(4) Operation or process segregation/isolation.

d. Use only RPE approved by the National Institute for Occupational Safety and Health (NIOSH). Breathing air supplied by airline or SCBA shall meet requirements set by applicable regulatory agencies.

e. The categories of RPE are as follows:

(1) Air purifying respirator.

(a) Particulate removal (mechanical filter).

(b) Gas/vapor removal (chemical filter).

(c) Combination particulate/gas/vapor removal.

(2) Air-supplying respirator.

(a) Self Contained Breathing Apparatus.

(b) Supplied as RPE with airline and full-facepiece (airline RPE).

f. In accordance with 29 CFR 1910.134, the employer shall fund all facets of the RPP.

g. The ability to use RPE will be a condition of employment when required by the job.

h. Employees shall not be assigned tasks requiring RPE without prior medical evaluation that to be performed IAW requirements of 29 CFR 1910.134.

i. Employees shall not wear nor be permitted to perform tasks requiring RPE if conditions exist that prevent a good facepiece-to-face seal. Conditions include sideburns; facial hair, temple pieces, glasses, goggles, absence of one or

both dentures, etc. Such individuals can wear only positive pressure RPE that does not require a face-to-facepiece seal.

j. If employee wears corrective glasses, goggles, or other personal protective equipment (PPE) (i.e., helmet or face shield), it will be worn in a manner that does not interface with the facepiece seal to user's face.

k. Use only SCBA devices in IDLH atmospheres.

l. Maintain compressed air cylinders for SCBA as prescribed by the American National Standards Institute (ANSI) Compressed Gas Association (CGA).

m. Areas/operations requiring RPE will be marked to inform personnel of work hazards or health risks involved and the type of RPE needed. Markings will be IAW 29 CFR Part 190.145.

n. Voluntary use of RPE, with the exception of air-supplied RPE and SCBA, will be permitted as detailed in paragraph 19 of this regulation.

8. Respiratory Protection Program Requirements

a. The OSHA Respiratory Protection Standard 29 CFR 1910.134, requires employers to establish and implement written RPP specific worksite procedures in workplaces where RPE is necessary for employee protection or whenever RPE is employer-required. The RPP shall be updated as necessary to reflect changes in workplace conditions that affect RPE use. Required program content is listed in Appendix b of this regulation. In areas where RPE is not required, the employer may provide RPE at the employee request, if such RPE use will not in itself create a hazard. Requirements for implementation of this provision are described in paragraph 19 of this regulation. The employer is required to designate an RPPA qualified by appropriate training or experience commensurate with program complexity; oversee or administer the RPP and conduct program evaluations.

b. The Commander, WRAMC, will designate a member of the ISO to serve as RPPA to implement, plan, and evaluate the installation RPP. With IHS and ISO assistance, the RPPA will prepare and update, as needed, an implementing RPP regulation, and will work with supervisors of workplaces where RPE is required to prepare and implement worksite-specific RPP SOPs for each worksite.

9. Selection of Respirators

a. Criteria for Selection:

(1) Respiratory Protection Equipment (RPE) shall be selected based on workplace hazard(s) to which the employee is exposed and user factors that affect RPE performance and reliability. A competent IH or other qualified professional will select RPE. The RPPA shall approve RPE prior to use.

(2) Only NIOSH-certified RPE shall be used. Respiratory Protection Program (RPE) shall be used to compliance with the conditions of its certification. Filters, cartridges, canisters used in the workplace will be labeled and color-coded with the NIOSH approval label. Labels shall not be removed and shall remain legible.

(3) Respiratory Protection Program (RPE) shall be selected from a sufficient number of models and sizes so that it is acceptable to, and correctly fits the user.

b. Evaluation of Worksite Respiratory Hazards:

(1) Industrial Hygiene Section (IHS) shall identify/evaluate respiratory hazards in the workplace. Evaluations shall include a reasonable estimate of employee exposures to respiratory hazards, workplace and user factors that may effect RPE performance and/or reliability, and an identification of the contaminant's chemical state and physical for. When a contaminant cannot be identified or a reasonable concentration estimate determined, the atmosphere shall be considered IDLH. Respiratory Protective Equipment (RPE) selection shall be based on these factors.

(2) Industrial Hygiene Section (IHS) surveys will be conducted periodically particularly after process change with potential of affection exposure levels. This evaluation helps ensure continued appropriateness of selected RPE.

(3) Supervisors shall report any new or proposed operations for which RPE may be required for IHS. Installation Safety Office (ISO) will notify IHS of operations noted or reported during inspections where need for RPE is suspected.

(4) Industrial Hygiene Section (IHS) will provide the RPPA with immediate notification of any unacceptable respiratory exposures. Personnel shall be identified using the Health Hazard Information Module (HHIM) database.

(a) All exposure monitoring data and a characterization of the occupational exposure(s).

(b) Information regarding additional personal protective clothing and equipment used by the employee.

c. Respiratory Protection Equipment (RPE) for IDLH Atmospheres. Employees shall use the following RPE in IDLH atmospheres:

(1) A full-facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or combination full facepiece pressure demand supplied-air RPE (SAR) with auxiliary self-contained air supply.

(2) Respiratory Protection Equipment (RPE) provided to escape IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

(3) Oxygen-deficient atmospheres shall be considered IDLH unless the RPPA or IHS demonstrates under all foreseeable conditions; the oxygen concentration can be maintained within the ranges specified in Table II of 29 CFR Part 1910.134.

d. Respirators for Non-IDLH Atmospheres.

(1) Use only RPE adequate to protect employee health and ensure compliance with all OSHA statutory/regulatory requirements, under routine or reasonable foreseeable emergency situations.

(2) Respiratory Protection Equipment (RPE) selected shall be designed to provide protection from the contaminant to which the employee is exposed.

(3) For protection against gases and vapors, the employer shall provide:

(a) An atmosphere-supplying or air purifying RPE provided it is equipped a NIOSH certified end-of-service-life indicator (ESLI) for the contaminant.

(b) If an ESLI is not available, the RPPA will implement a change schedule for canisters or cartridges to ensure that they are changed before the end of their service life. Information and data relied upon and the basis for reliance on the data shall be included.

(4) For protection against particulates, the following types of RPE will be provided:

(a) Atmosphere-supplying or air-purifying RPE with a NIOSH-certified filter as a high efficiency particulate air (HEPA) filter, or an air-purifying RPE with a NIOSH-certified filter for particulates.

(b) For contaminants consisting of particles with mass median aerodynamic diameters of at least two (2) micrometers, a NIOSH certified air-purifying RPE equipped with particulate filters.

10. Medical Evaluations

a. Using RPE may place a physiological burden on employees that varies with the type of RPE worn, the job, the workplace conditions in which the RPE is used and the employee's medical status. A medical evaluation will be provided to determine the employee's ability to use RPE before being fit tested, or required to use RPE in the workplace. Medical evaluations will be performed sing the medical questionnaire in Appendix c of 29 CFR part 1910.134, or an

initial medical examination that obtains the same information as the medical questionnaire.

b. Supervisors will coordinate with the Occupational Health Clinic (OHC) for a medical evaluation for RPE users under their supervision upon initial assignment or whenever the need for RPE is identified as described in paragraph 9h. Supervisors will initiate and complete Section 1 of WRAMC Form 1398, (Respirator User Evaluation Form) (see Figure 1). Supervisors will contact IHS for a workplace evaluation or determination of the type of RPE required if the worksite has not previously been evaluated. Supervisors will then contact the OHC to schedule an employee's appointment.

c. Occupational Health Clinic (OHC) will provide subsequent evaluations for employees whose initial medical evaluation demonstrates the need for a follow-up. Follow-up evaluations include medical tests, consultations or diagnostic procedures OHC deems necessary to make a final determination.

d. The medical questionnaire and evaluation shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. Questionnaires shall be administered in a manner to ensure employees understand its content. Supervisors will provide employees with an opportunity to discuss the questionnaire and examination results with the OHC during normal working hours.

e. The following information must be provided to the OHC before the OHC can determine, whether the employee is medically and physically able to use RPE:

(1) The type and weight of RPE to be used.

(4) The duration and frequency of RPE used (including use for rescue and escape).

(3) The expected physical work effort.

(4) Additional Personal Protective Equipment (PPE).

(5) Temperature and humidity extremes that may be encountered. Industrial Hygiene Section (IHS) will provide the preceding information after a worksite evaluation. The RPPA will provide a copy of the worksite specific RPP SOP to the OHC. Any supplemental information provided previously to the OHC regarding an employee, need not be provided for subsequent medical evaluation if the information remains the same.

f. At the completion of the evaluation, OHC will prove the supervisor with written report regarding the employee's ability to use prescribed RPE. The report shall provide only the following information.

(1) Any limitations on RPE use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the RPE.

(2) The need, if any, for follow-up medical evaluations.

(3) A statement that the OHC has provided the employee with a copy of his/her written recommendation.

g. If the respirator is a negative pressure, RPE and the OHC finds a medical condition that may place the employee's health at increased risk if the respirator is used, a powered air-purifying (PAPR) (RPE) shall be provided if the medical evaluation finds the employee can use such an RPE. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure RPE, then the employer is no longer required to provide a PAPR.

h. At a minimum, additional medical evaluations that comply with this regulation shall be provided if:

(1) An employee reports medical signs or symptoms elated to the ability to use RPE.

(2) The OHC or RPPA informs the supervisor the employee needs to be reevaluated.

(3) Information from the RPP (including observations made during fit testing and program evaluation) indicates a need for employee reevaluation.

(4) A change occurs in workplace conditions, (i.e., work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

l. At the completion of the medical evaluation, OHC will complete Section II of WRAMC Form 1398 and forward it to the IHS.

j. Discontinue medical evaluations when the employee is no longer required to use RPE.

k. For employees requesting voluntary RPE use, OHC will review medical documentation provided by the employee from their personal physician documenting that the employee is medically cleared to wear a RPE.

11. Fit Testing

a. Before requiring use of tight fitting facepiece RPE, employees must be fit tested with the same make, model, style, and size of RPE to be used. Industrial Hygiene Section (IHS) will contact the supervisor to schedule a fit test upon Receipt of WRAMC Form 1398 from the OHC.

b. Employees using tight-fitting facepiece RPE must pass appropriate qualitative or quantitative (QLFT or QNFT) fit tests. Protocol to administer OSHA-accepted QLFT or QNFT is detailed in Appendix a, 29 CFR 1910.134.

c. When a different RPE facepiece (size, style make or model) is used, employees using a tight-fitting facepiece RPE must be fit tested prior to initial use of the RPE and at least annually thereafter.

d. Additional fit tests shall be conducted when the employee reports, or when the supervisor, OHC, IHS or RPPA make visual observations of changes in employee's physical condition that could affect RPE fit. This may include; facial scarring, denture fixtures, cosmetic surgery, or body weight changes.

e. After passing the fit test, if employee notifies a supervisor, IHS, RPPA, or OHC that the fit is unacceptable, the employee shall be given a reasonable opportunity to select another RPE and be retested.

12. Use of Respirators

a. Facepiece Seal Protection:

(1) Supervisors will not permit RPE with tight-fitting facepieces to be worn by employees who have:

(a) Facial hair that comes between the sealing surface of the facepiece and the face that interferes with valve function.

(b) Any condition that interferes with the face-to-facepiece seal or valve function.

(2) If employee wears corrective eyewear or other personal protective equipment, supervisors shall ensure that such equipment is worn in a manner that does not interfere with the sea of the RPE facepiece.

b. Maintaining RPE Effectiveness.

(1) The supervisor will maintain appropriate surveillance of work conditions to determine the degree of employee exposure or stress when there is a change in the working conditions or degree of employee exposure or stress that may affect RPE effectiveness and will request IHS to reevaluate the RPE continued effectiveness.

(2) Supervisors shall ensure tht employees leave the RPE use area:

(a) To wash face/RPE facepieces as needed to prevent eye/skin irritation associated with RPE use.

(b) If they detect vapor/gas breakthrough changes in breathing resistance, or facepiece leakage.

(c) To replace the RPE, filter, cartridge, or canister elements.

(3) If employee detects vapor/gas breakthrough changes in breathing resistance, or facepiece leakage, the RPE must be repaired or replaced before the employee is allowed to return to the work area.

13. Cleaning, Maintenance, and Storage of Respirators

a. Cleaning. Respiratory Protection Equipment (RPE) that are clean, sanitary, and in good working order shall be provided to employees. The user is primarily responsible for maintenance and cleaning. Where RPE are used collectively or kept ready for emergency use, the supervisor will ensure maintenance and cleaning. Respiratory Protection Equipment (RPE) must be cleaned and disinfected in accordance with mandatory procedures outlined in Appendix D of this regulation or procedures recommended by the RPE manufacturer, provided that such procedures are of equivalent effectiveness. Clean and disinfect RPE at the following intervals:

(1) Respiratory Protection Equipment (RPE) used exclusively by one employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

(2) Respiratory Protection Equipment (RPE) used by more than one employee shall be cleaned and disinfected before being worn by another individual.

(3) Respiratory Protection Equipment (RPE) maintained for emergency use shall be cleaned and disinfected after each use.

(4) Respiratory Protection Equipment (RPE) used in fit testing and training shall be cleaned and disinfected after each use.

b. Storage. Respiratory Protection Equipment (RPE) will be stored as follows:

(1) Respiratory Protection Equipment (RPE) shall be stored for protection from damage, contamination, sunlight, extreme temperatures, dust, excessive moisture, and damaging chemicals. They shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

(2) Store covered emergency RPE in an area that is accessible to the employees IAW manufacturer's instructions. Clearly mark as containing emergency RPE.

c. Inspection.

(1) The following procedures will be followed when inspecting RPE.

(a) Respiratory Protection Equipment (RPE) used in routine situations shall be inspected before use and during cleaning.

(b) Respiratory Protection Equipment (RPE) maintained for emergency use shall be inspected at least monthly and checked for proper function before and after each use IAW manufacturer recommendations. The inspection will be documented.

(c) Inspect emergency escape-0nly RPE before transporting it into the workplace for use. They shall be used for escape only; Re-entry is prohibited.

(2) Supervisors will ensure that RPE inspections include the following:

(a) A check of RPE function, tightness of connections, and the condition of various parts including, the facepiece, head straps, valves, connecting tube, cartridges, canisters, filters.

(b) A check of elastomeric parts for pliability and signs of deterioration.

(3) In addition to the requirements of this section, inspect SCBA's monthly. Maintain air and oxygen cylinders in a fully charged state and recharge when pressure falls to 90% of manufacturer's recommended pressure level. The supervisor will ensure regulator and warning devices function properly.

(4) For emergency use RPE, the supervisor shall:
ML

(a) Certify the RPE by documenting the date the inspection was performed, the name (signature) of the person who performed the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected RPE.

(b) Provide this information on a tag or label attached to the storage compartment for the RPE. Keep this information with the RPE or include n inspection reports stored as paper or electronic files. Retain this information until replaced following a subsequent certification.

d. Repairs.

(1) Supervisors shall ensure RPE that fail an inspection or are found to be defective are repaired by the manufacturer or by personnel within their section that have been trained by the manufacturer.

(2) Repairs or adjustments to RPE are to be made only by persons appropriately trained to perform such operations and shall use only the manufacturer's NIOSH-approved parts designed for the RPE.

(3) Make repairs according to the manufacturer's recommendations/specifications for the type and extent of repairs to be performed.

(4) Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

14. Procedures to Ensure Adequate Air Quality, Quantity, and Breathing Air Flow for Atmosphere-Supplying Respirators

a. Occupational Safety and Health Administration (OSHA) standards require supervisors to ensure that employees using atmosphere-supplying RPE (supplied-air and SCBA) are provided with breathing gases of high purity.

b. Compressed air, compressed oxygen, liquid air, and liquid oxygen used with RPE must meet the following specifications.

(1) Compressed and liquid oxygen shall meet United States Pharmacopoeia requirement for medical or breathing oxygen, and

(2) Compressed breathing air shall meet Grade D breathing air requirements described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7, 1-1989, to include:

(a) 19.5% to 23.5% Oxygen content (v/v).

(b) Hydrocarbon (condensed) content of five (5) milligrams per cubic meter of air or less.

(c) 10 parts per million (ppm) or less of carbon monoxide content.

(d) 1000 ppm or less Carbon dioxide content.

(e) Lack of noticeable order.

c. Do not use compressed oxygen in atmosphere supplying RPE that have previously used compressed air.

d. Oxygen concentrations greater than 23.5% will only be used in equipment designed for oxygen service or distribution.

e. The supervisor shall ensure cylinders used to supply breathing air to RPE meet the following:

(1) Cylinders are tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR Part 173 and Part 178).

(2) Cylinders of purchased breathing air have a certificate of analysis from suppliers that breathing air meets requirement for Type 1-Grade D breathing air.

(3) The moisture content in the cylinder

does not exceed a dew point of -50° F (-45.6° C) at one (1) atmosphere pressure.

f. The supervisor shall ensure that the compressors used to supply breathing air to RPE are constructed and situated so as to:

(1) prevent entry of contaminated air into the air-supply system.

(2) Minimize moisture content so that the dew point of one (1) atmosphere pressure is 10° F (5.56° C) below the ambient temperature.

(3) Have suitable in-line air-purifying sorbent beds/filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained/replaced/refurbished periodically IAW manufacturer instructions.

(4) Have a tag containing the most recent change date and the signature of the person authorized by the employer to perform the change. The tag shall be maintained at the compressor.

g. For non oil-lubricated compressors, supervisors shall ensure that Carbon Monoxide (CO) levels do not exceed 10 ppm.

h. For oil-lubricated compressors, the supervisor shall use a high-temperature or CO alarm, or both, to monitor CO levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent CO in the breathing air from exceeding 10 Parts Per Million (ppm).

i. Supervisors shall ensure breathing air couplings are incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.

j. Supervisors shall use breathing gas containers marked IAW the NIOSH RPE certification standard 42 CFR part 84.

15. Use of Respirators in immediately Dangerous to Life and Health (IDLH) Atmospheres Including Interior Structural Firefighting

a. Procedures for IDLH Atmospheres. For all IDLH atmospheres, supervisors will ensure that:

(1) One employee (or ore when needed) is located outside the ILDH.

(2) Visual, voice or signal line communication must be maintained between employees in the IDLH atmosphere and employees located outside the atmosphere.

(3) The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue.

(4) Supervisor is notified before the employees located outside the IDLH atmosphere enter IDLH atmosphere to provide emergency rescue. Once notified, the supervisor will provide the necessary assistance appropriate to the situation.

(5) Employees located outside IDLH atmospheres are equipped with:

(a) A pressure demand/positive pressure SCBA or supplied-air RPE with auxiliary SCBA and either;

(b) Appropriate rescue equipment to remove individual from IDLH atmospheres where rescue equipment contributes to the rescue of the employee(s) without increase in overall risk resulting from entry or;

(c) Equivalent means for rescue where equipment is not required under paragraph 13e(2) above.

b. Procedures for Interior Structural Firefighting. In addition to the requirements outlined in this section, supervisors shall ensure that.

(1) At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times.

(2) At least two employees are located

outside the IDLH atmosphere.

(3) All employees engaged in interior structural firefighting use SCBAs.

(4) One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as, an incident Commander or Safety Officer, as long as the individual is able to perform rescue activities without jeopardizing the safety and health of any firefighter working at the scene.

(5) Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

16. Respirator Use in the Tuberculosis (TB) Control Program

a. Use of RPE for protection from exposure to TB is required IAW WRAMC Reg 40-26, Tuberculosis Exposure Control program.

b. The Infection Control Committee will designate the type of REP from among NIOSH-approved TB respirators, while exceeding the Centers for Disease Control and prevention (CDC) standard performance criteria for approved TB RPE that will be used based on recommendation from the IHS.

c. Department/Service Chiefs will identify the minimum adequate number of employees who will be required to wear RPE to protect against exposure to patients with suspected/confirmed TB. Supervisors will coordinate with the OHC for medical evaluation and IHS for fit testing and training IAW procedures in this regulation.

17. Training and Information

a. 29 CFR 1910.134 requires that effective training be provided to employees who are required to wear RPE. The training must be comprehensive and in a manner that is understandable to the employee. Training shall be provided prior to the employee using RPE in the workplace and annually, thereafter, or ore often under conditions described below.

b. Training will be conducted by the IHS at the time of RPE fit testing or upon request from the supervisor of RPPA when required. At the end of the training session, the IHS will ensure that each employee can demonstrate knowledge of at least the following:

(1) Why the RPE is necessary and how improper fit, usage or maintenance can compromise the effectiveness of the RPE.

(2) Respiratory Protection Equipment (RPE) limitations and capabilities.

(3) How to use the RPE effectively in emergency situations, including situations in which the RPE malfunctions.

(4) How to inspect, put on (don), remove (don off), use, and check the seals of the RPE.

(5) Proper cleaning, maintenance, and storage procedures for RPE.

(6) How to recognize medical signs and symptoms that may limit or prevent the effective use of RPE.

(7) The general requirements of 29 CFR 1910.134, and this regulation.

c. A supervisor who is able to demonstrate that a new employee has received training within the last 12 months that addresses the elements specified in paragraph 17b above is not required to repeat such training provided that the employee can demonstrate knowledge of these elements. Previous training not repeated initially by the employer must be provided no later than 12 months from the date of the previous training.

d. Retraining shall be administered annually and when the following situations occur:

(1) Changes in the work place or the type of RPE render previous training obsolete.

(2) Inadequacies in the employee's knowledge or use of the RPE indicate that the employee has not retained the requisite understanding or skill.

(3) Other situations that arises in which retraining appears necessary to ensure safe RPE use.

18. Recordkeeping

a. Medical Evaluations. Records of medical evaluations required by 29 CFR 1910.13 will be placed in the appropriate medical record IAW AR 40-66. For civilian employees, medical evaluations will be kept in the Civilian Employee Medical Records maintained by the OHC. For military personnel, medical evaluations will be kept in the Military Outpatient Medical Record maintained by the Patient Administration Directorate and made available IAW AR 40-66 and 29 CFR 1910.1020. Medical records will maintained and retained at the medical treatment facility during the time of employment and are kept permanently at the National Records Center after the civilian employee/active duty member retires or leaves federal/military service.

b. Fit Testing.

(1) The IHS shall establish a record of the qualitative and quantitative fit tests administered to an employee including:

(a) The name or identification of the employee tested.

(b) Type of fit test performed.

(c) Specific make, model, style, and size.

(d) Date of test.

(e) The pass/fall results for QLFTs or the fit factor and strip chart recordings or other recording of the test results for QNFTs.

(2) Walter Reed Army Medical Center (WRAMC) Form 1398 (Figure 1) will be utilized to document this process. At the completing of training and fit testing, the IHS will complete Section III of WRAMC Form 1398 and the employee will sign the training statement at the bottom of the form. The IHS will forward a copy to the supervisor and maintain the original until the next evaluation for the employee or until the employee leaves current employment.

(3) Industrial Hygiene Section (IHS) will issue Respiratory Protection Equipment users a Certification Card after the fit testing, training and medical evaluation have been successfully completed. The RPE user will carry the card at all times while using RPE. The card will be reviewed on an annual basis.

c. The RPPA shall retain a copy of the current WRAMC RPP regulation.

d. Required written materials retained under this paragraph shall be available upon request to affected employees. These documents will also be produced upon request to affected employees. These documents will also be produced upon request to affected employees and to OSHA officials.

19. Respirator Use When Not Required Under the Occupational Safety and Health Administration (OSHA) Respiratory 29 Code of Federal Regulations (CFR) 1910.134.

a. In accordance with 29 CFR 1910.134 an employer may provide RPE at the request of employees or permit employees to use their own RPE, if the employer determines that such RPE use will not in itself create a hazard. If the employer determines that voluntary RPE use is permissible, the employer shall provide the RPE users with information contained in Appendix e to this regulation. In addition, the employer must establish and implement those elements of a written RPP necessary to ensure that any employee using a RPE voluntarily is medically able to use that RPE, and that the RPE is cleaned, stored and maintained so that its use does not present a health hazard to the user. **Exception:** Employees are not required to include in a written RPP those employees whose only use of RPE involves the voluntary use of filtering facepieces (dust masks).

b. Employees at WRAMC will be permitted to use their own RPE and may under some circumstances, be supplied a RPE for voluntary use, with the exception of an air-supplied RPE or SCBA based on compliance with the

provisions of this regulation. Employees will notify their supervisor of the request for voluntary use of RPE in the workplace. The supervisor will provide the employee with a copy of Information for Employee Using RPE When Not Required Under the OSHA Respiratory Protection Standard 29 CFR 1910.134 (Appendix e to this regulation).

c. The supervisor will coordinate with IHS to determine that RPE use will not in itself create a hazard in the workplace and to evaluate the proposed RPE to ensure that it is certified for use to protect against the contaminant of concern. The IHS will counsel the employee on the use of RPE.

d. With the exception of the use of filtering facepieces, employees requesting voluntary use of RPE will be required to submit documentation from their personal physician stating that they are medically able to use the proposed RPE. The supervisor will forward the documentation to the OHC for review, approval and fitting in the employees' medical record. The OHC will contact the supervisor if additional information is required from the employee.

e. The supervisor will counsel the employee on cleaning, storing and maintaining RPE IAW paragraph 12 of this regulation and will include the procedures for voluntary RPE use in the worksite specific RPP SOP.

20. Program Evaluation

a. The RPPA, IHS and supervisors will conduct workplace evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

b. Supervisor will revise the workplace specific RPP SOP as needed to reflect changes in the workplace or in the respirator use. These changes include, but are not limited to: different respirator choices, changes in fit testing, and changes in work operations. The RPPA will revise the installation RPP regulation as needed.

c. Supervisors shall consult with employees required to use respirators on a regular basis to assess the employee's views on program effectiveness and to identify any problems. Problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

(1) Respirator fit (including the ability to use the RPE without interfering with effective workplace performance).

(2) Appropriate RPE selection for the hazards to which the employee is exposed.

(3) Proper RPE use under the workplace conditions that the employee encounters.

(4) Proper maintenance of RPE.

APPENDIX A

REFERENCES

1. Required References

a. AR 11-34, Army Respiratory Protection Program, 15 Feb 90.

b. AR 40-5, Preventive Medicine, 15 Oct 90.

c. AR 40-66, Medical Record Administration, 3 May 99.

d. AR 385-10, Army Sfaety Program, 29 Feb 00.

e. WRAMC Reg 385-6, WRAMC Hazard Communication Program, 6 Dec 97.

f. WRAMC Reg 385-8, Confined Space Entry Program, 14 Jun 99.

g. WRAMC Pam 40-14, Occupational Vision Program, 15 Mar 00.

h. WRAMC Reg 40-26, Tuberculosis Exposure Control Plan, 11 May 00.

i. 29 CFR 1910,134, Respiratory Protection.

j. 29 CFR 1910.155 Subpart L. Fire Protection.

k. 29 CFR 1910.1020, Access to Employee Medical Records.

l. 42 CFR 84, Certifiction for the New Class of Respirators, NIOSH/CDC.

m. 49 CFR 173, Maintenance and Testing of Cylinders, U.S. Department of Transportation.

n. 49 CFR 178, Container Specifications Regulations, U.S. Department of Transportation.

o. ANSI/CGA Specification G7.1, Commodity Air Specification.

2. Related References.

a. TB MED 509, Spirometry in Occupational Health Surveillance, 24 Dec 86.

b. ANSI Z28.5, Practices for Respiratory Protection for the Fire Service.

c. American National Standard Institute (ANSI) Z88.2, Practices for Respiratory Protection.

d. DHHS (NIOSH) Publication No. 96-101, NIOSH Guide to the Selection and Use of Particulate Respirators Certified as mandated by 42 CFR 84, Jan 96.

e. Respiratory Protection, Inspection, Cleaning and Maintenance, American Industrial Hygiene Association.

APPENDIX A

REFERENCES (Continued)

3. Prescribed Form

Walter Reed Army Medical Center Form 1398, Respirator User Evaluation Form.

APPENDIX B

GUIDELINES FOR A WRITTEN WORKSITE SPECIFIC RESPIRATORY PROTECTION PROGRAM

1. A written worksite specific Respiratory Protection Program (RPP) Standing Operating Procedure (SOP) is required for every workplace where respirators are necessary to protect the health of the employee or whenever respirators are required. The SOP must be updated as necessary to reflect any changes I workplace conditions that affect respirator use.

2. The following provisions shall be included in the SOP, as applicable. The applicable sections of this regulation should be excerpted as applicable to the specific worksite. When an element listed below does not apply to the worksite, if need not be addressed, i.e., the element on breathing air quality only applies to worksite where self-contained breathing apparatus (SCBA) or supplied air respirators (SAR) are used.

a. Procedures for selecting respirators for use in the workplace;

b. Medical evaluations of employees required to use respirators;

c. Fit testing procedures for tight-fitting respirators;

d. Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations. The SOP should document the specific circumstances/conditions under which respirators are worn in the workplace;

e. Procedures and schedules for cleaning, disinfecting, storing, inspecting, discarding, and otherwise, maintaining respirators.

f. Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators;

g. Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations;

h. Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance. The Industrial Hygiene Section provides this training initially and annually at the time of fit testing;

i. Procedures for regularly evaluating the effectiveness of the program;

j. Additional elements which must be included in the RPP SOP for firefighters or other personnel who inspect, use, or are responsible for SCBA's or SAR's routine or emergency use are:

(1) Performing Inspections and recharging of system

(2) Respirator use for IDLH atmospheres

(3) Procedures for IDLH atmospheres

(4) Procedures for certification or testing of breathing air quality and use

(5) Maintenance and testing breathing air cylinder

APPENDIX B (Continued)

GUIDELINES FOR A WRITTEN WORKSITE SPECIFIC
RESPIRATORY PROTECTION PROGRAM

(6) Maintenance of compressors used to supply breathing air including the names of personnel authorized to performance maintenance

(7) Procedures for interior structural firefighting (firefighters only)

k. Procedures to be followed if an employee requests voluntary use of a respirator.

3. The Respiratory Protection Program Administration (RPPA); the Industrial Hygiene and Occupational Health Sections, Preventive Medicine Service, and the Installation Safety Office, are available to provide guidance to supervisor in the preparation of written worksite specific RPP SOPs.

4. All worksite specific RPP SOPs must be sent to the RPPA for review and approval prior to publication and distribution.

APPENDIX C

RESPIRATOR USER SEAL CHECK PROCEDURES

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this Appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

1. Facepiece Positive and/or Negative Pressure Checks

a. Positive Pressure Check - Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing if after the test.

b. Negative Pressure Check - Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

2. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

APPENDIX D

RESPIRATOR CLEANING PROCEDURES

1. The procedures provided below are provided for use when cleaning respirators. They are general in nature and as an alternative, the cleaning recommendations provided by the manufacturer of the specific respirators used in the workplace may be utilized for cleaning the respirator provided such procedures are as effective as those listed below. Equivalent effectiveness means the procedures ensure the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

2. Respirator cleaning procedures are as follows:

a. Remove filters, cartridges, or canister. Disassemble face-pieces by removing speaking diaphragms, demand and pressure-demand valve assembles, hoses, or any components recommended by the manufacture. Discard or repair any defective parts.

b. Wash components in warm (43°C [110°F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

c. Rinse components thoroughly in clean, warm (43°C [110°F] maximum), preferably running water. Let drain.

d. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

(1) Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43°C (110°F); or

(2) Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water 43°C (110°F): or,

(3) Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

e. Rinse components thoroughly in clean, warm 43°C (110°F), preferably running water. Let drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

f. Components should be hand-dried with a clean lint-free cloth or air-dried.

g. Reassemble face-piece, replacing filters, cartridges, and canisters where necessary.

h. Test the respirator to ensure that all components work properly.

APPENDIX E

INFORMATION FOR EMPLOYEES USING RESPIRATORS WHEN NOT REQUIRED, UNDER THE OSHA RESPIRATORY PROTECTION STANDARD 29 CFR 1910.134

1. Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

2. You should do the following:

a. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

b. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

c. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

d. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

GLOSSARY

ABBREVIATIONS

AF	Appropriated Fund
ANSI	American National Standards Institute
AR	Army Regulation
BMAR	Birth Month Annual Review
C	Centigrade
CC	Cubic Centimeter
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CPAC	Civilian Personnel Activity Center
CO	Carbon Monoxide
DA	Department of the Army
DOD	Department of Defense
ESLI	End-of-Service Life Indicator
F	Fahrenheit
HAZCOM	Hazard Communication
HEPA	High Efficiency Particulate Filter
IAW	In Accordance With
IDLH	Immediately Dangerous to Life or Health
IHS	Industrial Hygiene Section
ISO	Installation Safety Office
MUC	Maximum Use Concentration
NAF	Non Appropriated Fund
NIOSH	National Institute of Occupational Safety and Health
OHC	Occupational Health Clinic
OSHA	Occupational Safety and Health Administration
PA	Respiratory Protection Program Administrator
PAPR	Powered Air-Purifying Respirator
PMS	Preventive Medicine Section
PPE	Personal Protective Equipment
PPM	Parts Per Million
QLFT	Qualitative Fit Test
QNFT	Quantitative Fit Test
RPE	Respiratory Protective Equipment
RPP	Respiratory Protection Program
RPPA	Respiratory Protection Program Administrator
SAR	Supplied Air Respirator
SCBA	Self Contained Breathing Apparatus
SF	Standard Form
SOP	Standing Operating Procedure
TB	Tuberculosis
WG	Wage Grade
WRAMC	Walter Reed Army Medical Center

GLOSSARY (Continued)

EXPLANATION OF TERMS

a. **Air-purifying respirator** means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

b. **Atmosphere-supplying respirator** means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

c. **Canister or cartridge** means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

d. **Demand respirator** means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

e. **Emergency situation** means any occurrence, such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

f. **Employee exposure** means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

g. **End-of-service-life indicator (ESLI)** means a system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

h. **Filter or air-purifying element** means a component used in respirators to remove solid or liquid aerosols from the inspired air.

i. **Filter facepiece (dust mask)** means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with entire facepiece composed of the filtering medium.

j. **Fit factor** means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

k. **Fit test** means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. See also Qualitative fit test (QLFT) and Quantitative fit test (QFNT).

l. **Helmet** means a rigid respiratory inlet covering that also provides head protection against impact and penetration.

m. **High efficiency particulate air (HEPA) filter** means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

n. **Hood** means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

o. **Immediately dangerous to life or health (IDLH)** means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Glossary (Continued)

p. **Interior structural firefighting** means the physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage (See 29 CFR 1910.155)

q. **Loose-fitting facepiece** means a respiratory inlet covering that is designed to form a partial seal with the face.

r. **Negative pressure respirator (tight fitting)** means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

s. **Oxygen deficient atmosphere** means an atmosphere with an oxygen content below 19.5% by volume.

t. **Physician or other licensed health care professional (PLHCP)** means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide some or all of the health care services required by paragraph (e) of this section.

u. **Positive pressure respirator** means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

v. **Powered air-purifying respirator (PAPR)** means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

w. **Pressure demand respirator** means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

x. **Qualitative fit test (QLFT)** means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

y. **Quantitative fit test (QNFT)** means assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

z. **Respiratory inlet covering** means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. Facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

aa. **Self-contained breathing apparatus (SCBA)** means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

bb. **Service life** means the period of time that a respirator, filter or sorbent, or other respiratory equipment provide adequate protection to the wearer.

cc. **Supplied-air respirator (SAR) or airline respirator** means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

dd. **This section** means this respiratory protection standard.

WRAMC Reg 385-9

Respirator User Evaluation Form

Section I (completed by **Supervisor)**

Employee Name (Last, First)

SSN

Job Title

Department

Operation Building #

Hazard or Exposure for which Respirator is required

Type and Weight of Respirator to be used

Was above Respirator approved by IHS?

Additional PPE worn with Respirator

Duration and Frequency of use hrs/day days/wk

Temperature (>77F) or Humidity extremes possible?

Light Mod Heavy
Expected physical effort while wearing Respirator

Supervisor : Name (print) Signature Phone Date

Section II (completed by **Occupational Health Clinic)**

Last PFT (date): nl/abnl

The employee is/is not medically able to the use of the designated type of respirator.

There are/are no limitations/restrictions to the use of the designated type of respirator (state if any)

Next evaluation should be scheduled
a) in ____ months
b) with change in exposure, work practice, respirator type or health status.

I have received a copy of this recommendation:

Employee signature Date

Occupational Health Physician/PA Signature and Stamp Date

Section III (completed by **Industrial Hygiene Section)**

Type of Respirator recommended: ½ Face Full Size: S M L XL

Manufacturer

Model No.

NIOSH TC#

Qualitative Pass Fail Quantitative Pass Fail
Fit Factor

____ N95
____ Negative Pressure-tight fitting, cartridge
____ Powered Air Purifying/PAPR
____ Positive Pressure Demand
____ Supplied Airline Respirator
____ SCBA

Date of Test: _____

I certify that training has included instruction and practice in leak test, adjustments, visual inspections, hazards involved cleaning/disinfection and storage principles in accordance with 29 CFR 1910.134.

Signature of person completing fit testing Date

Figure 1

Respirator User Evaluation Form (Continued)

I am aware that in addition to fit-testing by a competent individual, I must (a) fit check my respirator prior to each use, (b) report any improper fit, damage or defect to my supervisor, (c) not wear an ill-fitting or defective respirator, and (d) require a new fit test if there is any change in my facial configuration (e.g. weight loss, etc.)

Employee Signature Date

Process Flow:

The Industrial Hygiene Section, Installation Respiratory Protection Specialist/Director or other qualified industrial hygiene personnel determines the type of respiratory protection required. Supervisor should contact IHS at (202) 356-0067/72.

Supervisor initiates the Respirator User Evaluation Form, requesting respiratory clearance from Occupational Health Clinic (OHC). Supervisor makes appointment for employee with Occupational Health Clinic at (202) 782-3611/3668.

Employee reports to OHC with Respirator User Evaluation Form, Section I completed and signed by supervisor.

Occupational Health Clinic signs and maintains a copy of the form in employee health record.

Occupational Health Clinic forwards Respirator User Evaluation Form daily to IHS for scheduling of respirator fit testing.

Industrial Hygiene Section contacts employee's supervisor and schedules fit testing.

When fit testing is completed, IHS will sign Section III and employee will sign training statement on bottom of form. The IHS will forward a copy to the supervisor and maintain the original for record keeping until the next evaluation for the employee or until the employee leaves current employment.

Original: IHS
1st Copy: Supervisor
2nd Copy: OHC
3rd Copy: Employee

WRAMC FORM 1398
1 May 99

Figure 1

The proponent agency of this publication is the Safety Office. Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, Walter Reed Army Medical Center, ATTN: MCWR-S, 6900 Georgia Ave, N.W., Washington, DC 20307-5001.

FOR THE COMMANDER:

OFFICIAL:

RANDAL L. TREIBER
COL, MS
Garrison Commander

SAMUEL A. MCFARLAND III
Executive Assistant
US Army Garrison, WRAMC

DISTRIBUTION:
A

Glossary (Continued)

ee. Tight-fitting facepiece means a respiratory inlet covering that forms a complete seal with the face.

ff. User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.